Colorado Demography Office
Roles and Responsibilities

- **State Agency**
  Responsible for population data needed by state agencies.

- **Department of Local Affairs**
  Prepares data and information in ways that account for local perspectives, needs.

- **Public Information**
  Makes data and information readily available to the public, including citizens, businesses and non-profit agencies

Outline of Who We Are

I. **Types of Population Data; Programs**
II. **Other Types of Available Data**
III. **Summary of Available Data**
IV. **Relationships of the Data**
V. **Uses of the Data**

I. Types of Population Data; Population Programs

- **Census**
  counts, surveys of the existing population every ten years (ending in zero) reported by block.

- **Estimates**
  determination of "current" population totals based on data indicative of the population or population change by county / municipality.

- **Forecasts**
  expected population totals and those by age and gender in the future by county.

Population Programs

1. **Census** (data by block or block group)

  – Conducted by the U. S. Census Bureau every ten years.

  – American Community Survey to replace the long form.

  – Requires complete map of every street and inventory of all housing units.

2. **Estimates** (county and municipality)

  – county estimates based on components of change: natural increase (births – deaths) and migration from I.R.S data.

  – municipal (and CTF special district) estimates based on housing units.

  – local governments assist in providing data and may challenge the preliminary estimate.

3. **Forecasts** (county only)

  – population change largely tied to economic change.

  – economic forecast establishes demand for labor.

  – demographic model indicates supply of labor provided by existing populations.

  – differences in labor demand vs. labor supply resolved by the net migration of populations / households.

Economic Forecasting Approach

• economic forecasts prepared by the Center for Business & Economic Forecasting (CBEF)

• program of Local Economic Information and Forecasting Assistance (LEIFA) enables counties to understand their local economy and make more detailed choices/forecasts.

• final forecasts are those which include local, regional and national perspectives.

Local Economic and Information Forecasting Assistance - LEIFA
- Data preparation
- Economic base analysis
- Forecasting work sheets

3. Forecasts (continued)

Demographic Forecasting Model

• Survives age-gender population cohorts from one year to the next.

• Has women of child-bearing age give birth to children according to age-specific fertility rates.

• Includes several types of migration.

Types of Migration

• Demographic
– Young adults: students, military, prisoners, ski bums, opportunity seekers.
– Retirees

•Economic
– Due to labor demand: job opportunities or losses.

**Integration of the Economic and Demographic Forecasts:
The balancing of labor demand and labor supply**

•Commuting
•Detailed analysis of labor force participation rates
•Multiple job holding
•Workforce development problems and opportunities

II. Other Types of Available Data

from the Census

• Maps of street center-lines, other major features, and political boundaries (the TIGER file).

• Housing unit data: Master Address File and, outside urban mail delivery areas, maps with spots for each housing unit.

• Living Arrangements:
  –Group quarters: institutional and non-institutional
  –Households by type: family and non-family

  –Ethnicity: race and Spanish-origin (or not).

  –Economic characteristics of the population (see The Labor Market below).

  –Social Characteristics

II. Other Types of Available Data cont'd

from Estimates

– **Components of change**
- •Vital events: births and deaths.
- •Migration: international and domestic, in- , out-, and net-.

– **Symptomatic data**
- •School enrollment
- •Jobs
- •Population 65+ tied to Medicare

– **New Housing Units**

from Forecasts

–**The Economy**
- •Jobs = wage and salary jobs + proprietors.
- •Personal Income

–**The Labor Market**
- •Commuters
- •Second- and Third- Jobs
- •Labor Force = Employed + Unemployed Persons

III. Summary of Available Data

a. **The Economy:** jobs, personal income.

b. **The Labor Market:** commuters, second jobs, the Labor Force = employed + unemployed.

c. **Population:** by age and gender.

d. **Social Characteristics:** ethnicity, other.

e. **Living Arrangements:** group qtrs, households.

f. **Household Income:** by household types.

g. **Housing Units:** various characteristics.

III. Summary of Available Data (in Detail)

b. **The Labor Market**

– Commuters, Net
- In- Commuters
- Out- Commuters

– Second and Third Jobs

– Labor Force Participants
- Employed Persons
- Unemployed Persons
  - Unemployment rate

c. **Population**
- Totals
- Age Groups
- Gender

d. **Social Characteristics**

- Ethnicity: Race, Spanish Origin or Not.
- Ancestry, Place of Birth, Citizenship, Language Spoken at Home
- Residence in Five Years Before
- Education
- Disability Status
- Veteran Status
- Urban or Rural; Metropolitan or Non-Metropolitan

e. **Living Arrangements**

– Group Quarters
- Institutional
  - Corrections Institutions
  - Nursing Homes
  - Hospitals for Long-Term Conditions

- Non-Institutional
  - Military Quarters
  - College and Other Dormitories
  - Rooming Houses

– Households, by Type
- Family Households
  - Married-Couple Families
  - Female, Male Householder Families
    » With, or Without Children Under 18

- Non-Family Households
  - Householders Living Alone
  - Households with Unrelated Individuals

III. Summary of Available Data (in Detail)

f. **Household Income**

–Income Groups:

 Every $5,000 up to $50,000, every $10,000 up to $100,000, $100,000 and over.

–Household Types:

- One adult, Two or More Adults
- With Children, Without Children
- Householder age: 18 – 24, 25 – 44, 45 –64, 65+

–Geography:

- Planning and Management Regions, except for census year, then data available by census block groups.

g. **Housing Units**

– Housing Units in Structure

- 1-unit, detached
- 1-unit, attached
- 2 units, 3 or 4 units, 5 to 9 units
- 10 to 19 units
- 20 or more units
- Mobile home
- Boat, RV, van, etc.

– Housing Occupancy

- Occupied Housing Units
- Vacant Housing Units
  - Non-Seasonal, Recreational or Occasional Use
  - Seasonal, Recreational or Occasional use
- Vacancy Rates
  - Homeowner vacancy rate
  - Rental vacancy rate

– Housing Tenure

- Owner-Occupied Housing Units
- Renter-Occupied Housing Units

- Average household size of owner-occupied units
- Average household size of renter-occupied units

–Other Characteristics of Housing Units

•Year Structure Built	Value
•Rooms	Mortgage Status
•Year Hhldr Moved Into Unit	Monthly Owner Costs
•Vehicles Available	Owner Costs % of Income
•House Heating Fuel	Gross Rent
•Occupants per Room	Gross Rent % of Income

IV. Relationships of the Data

1. **Within the Economy.**
2. **Between the Economy and the Population.**
3. **Between the Population and Housing Units.**
4. **Between the Economy and Household Types.**
5. **Between the Economy and Household Income**

1. Relationships Within the Economy

–**Basic Industries:** those that relate to the "outside world", bring in outside dollars.
- •agriculture, mining, manufacturing, defense
- •tourism: destination, 2nd home occupants
- •Retirees

–**Non-Basic Industries:** local resident services
housing, maintenance, utilities, retail, education,
health, public safety, services, entertainment

2. Relating the Economy to the Population

Jobs by Place of Work   **The Economy**
- Commuters   **The Labor Market**
- Second and Third Jobs
= Employed persons by Place of Residence
+ Unemployed persons by Place of Residence
= **Labor Force Demand** by Place of Residence

(Working from the bottom up)

Labor Force Supply by Place of Residence
x   Labor Force Participation Rates
=   Non-Institutional Population 16+
x   Non-Institutional Population Rates
=   Population 16+
x   Proportional of population 16+
Total Population

Local Employment Dynamics or the
Longitudinal Employer – Household Dynamics program
of the U. S. Census Bureau and the U. S. Department of Labor

IV. Relationships of the Data (cont'd)

3.   Relating the Population to Housing Units
(Working from the bottom up)

Total Population
+   Group Quarter Population
=   Household Population
x   Average Household Size
=   Occupied Housing Units = Households
=   Vacant Housing Units, *then subtracting*
x   Vacancy Rate
Total Housing Units

4. Relating Jobs by Industry to Household Type

–Profiles of Household Types by Economic Areas in Comparison to National and Regional More General Profiles.

–PUMS -- Public User Microdata Sample -- Analysis   Relating Jobs to Household Types.

–Industry Surveys

5. Relating Jobs by Industry/Occupation/Income to Household Income

–Profiles of Household Income by Household Type by Economic Areas in Comparison to National and Regional More General Profiles.

–PUMS -- Public User Microdata Sample -- Analysis Relating Jobs to Household Income.

–Industry Surveys.

V.   Uses of the Data

- **In Economic Development Analyses.**
- **In Workforce Development Analyses.**
- **In Population Surveys and Analyses.**
- **In Social Analyses of Living Arrangements.**
- **In Health and Education Services Planning.**
- **In Housing Needs Assessments.**
- **In Community Service Needs Assessments.**
- **In Land-Use and Other Resource Use Planning.**

V. Uses of the Data (cont'd)

•In Economic Development Analyses

–Information on the existing economy: jobs by industry, sources of income.

–Identification of major components of the economy: basic industries, drivers, non-basic industries (local resident services).

–Evaluations of basic industries: SWOP.

–Evaluation of non-basic industries.

–Forecasts of industry possibilities.

•In Workforce Development Analyses

–Forecasts of the demand for labor.

–Analysis of the existing supply of labor.

–Analysis of labor force potential and needs for training of all and special populations.

–Analysis of existing matches between labor demand and labor supply, including commuters.

•In Population Surveys and Analyses

–Base data on the population regarding age, gender, ethnicity – ancestry, other for evaluation of citizen, voter, consumer, and user preferences.

•In Social Analysis of Living Arrangements

–Historical and base data on living arrangements over time.

–Existing and prepared cross-tabulations of many variables in relation to living arrangements.

•In Health Services Planning

–In the analysis of incidents or rates of diseases and other health problems to population and other characteristics.
–In the forecasting of needs for health services.

•In Education Planning

–In the analysis of education levels in relationship to population and economic characteristics.
–In the forecasting of needs for educational services.

•In Housing Needs Assessments

–Household income data for determining the demand or needs for housing

–Housing data -- on units in structure, occupancy, tenure, and characteristics – for analyses of existing supply.

–The analysis of housing demand in relation to population and other characteristics.

–Forecasts of housing demands and needs based on economic forecasts and in relation to household income.

V. Uses of the Data (cont'd)

• In Community Service Needs Assessments, including those served by public, private and non-profit organizations.

–The analysis of service demands and/or needs in relation to demographic and other characteristics.

–Forecasts of community service demands / needs based on economic and demographic forecasts.

•In Land Use and Other Resource Use Planning

–Base population and housing data for the analyses of land, water and other resource use.

–Forecasts of jobs, population and housing, for use in forecasting land, water and other resource demands.

–Based on various relationships between jobs and income and that of population, households, and household income, more comprehensive understandings of resource use as caused by particular projects, plans.